POLICY BRIEF

June 2017
The WRC operates in terms of the Water Research Act (Act 34 of 1971) and its mandate is to support water research and development as well as the building of a sustainable water research capacity in South Africa.

Building capacity in water services risk management

Comprehensive risk assessment and management is critical to water and wastewater services delivery. The Water Research Commission, in a collaborative project with the Department of Science and Technology, assisted municipalities in the Eastern Cape and KwaZulu-Natal to build capacity around and implement water safety planning and wastewater risk abatement plans.

Background

The most effective means of consistently ensuring functional and effective water/wastewater system infrastructure is through the use of a comprehensive risk assessment and management approach that encompasses all components of the water/wastewater system. Fundamental to successful execution of such activities is proper planning.

Water safety planning (WSP) and wastewater risk abatement plans (W_2RAP) form integral parts of the Department of Water and Sanitation's Blue Drop and Green Drop programmes respectively. In previous projects the Water Research Commission (WRC) and its research partners developed guidelines and Web-based tools for both these aspects of water services provision.

The WSP and W_2RAP processes assist water services authorities (WSAs) by prioritising water and wastewater services risks, providing targeted support to address gaps and weaknesses. The continuous improvement focus of the processes encourages internal performance improvement through an emphasis on regular performance measurement improvement of information flow to inform management decision-making.

In this follow-up project, the WRC looked to use these tools to capacitate municipal officials at selected district municipalities in the Eastern Cape and KwaZulu-Natal. This objective of the project was to enable the respective municipalities to:

- Conduct a situational analysis of existing WSPs and W_2RAPS in alignment to Blue and Green Drop programme requirements.
- Assist in the drafting of plans for identified systems at municipalities where required.
- Empower the municipalities through the above implementation to conduct effective risk management.

The project was undertaken in partnership with the Department of Science and Technology and was conducted in the following municipalities:

Water safety planning
- Amajuba
- Zululand
- uThungulu
- uThukela
- OR Tambo

Wastewater risk abatement planning
- Ugu
- Zululand

Implementation process

At the start of the project water and wastewater risk management was assessed in the water/wastewater treatment systems that formed part of the study. While it was found that all the municipalities practiced some form of risk management, some systems were found to have no risk management, while risk management varied from system to system.

In terms of water safety planning, the municipalities evaluated were found to be particularly vulnerable in terms of monitoring and evaluation, management and support programmes, documentation and communication procedures and water safety plan review.

In terms of wastewater risk abatement planning, the municipalities were found to be vulnerable in the areas of control measures and corrective actions, monitoring and evaluation, management and support programmes, documentation and communication procedures and wastewater risk abatement planning review.

Workshops were then conducted with all the participating WSAs and action plans for both WSPs and W_2RAPs were developed for implementation. In terms of capacity building and knowledge dissemination, 212 persons were exposed on varying levels in relation to risk management in both water and wastewater. This was facilitated through the various workshops and one-on-one engagements with the project team.

Although they successfully completed the action plans, certain WSAs found implementation challenging. This can be attributed to a lack of commitment and capacity, but is also influenced by the wavering support for the Blue Drop and Green Drop programmes.

Lessons learnt and recommendations

The project achieved varying levels of success and, where WSAs showed strong commitment and capacity significant progress was reported. Through the process it became clear that many of the WSAs lacked the key system and water quality information required to undertake proper risk management.

As the project progressed one of the major contributing factors was the limited management commitment of certain WSAs as well as high staff turnover. This factor is a challenge faced by most municipalities within South Africa. This impacts directly on what can be achieved with a project of this nature.

A future consideration is to include municipal managers, portfolio councilors and mayors from the outset. This can be facilitated by using the existing national South African Local Government Association platforms to profile efforts within the respective WSAs.

In addition, WSAs need to support the idea that risk teams are made up of multidisciplinary representation of officials who will jointly drive progress. A need was identified to further support risk management in order to ensure the sustainability of what has already been achieved.

A notable achievement is the fact that some WSAs have already taken the necessary steps to empower their internal staff to use what they have learnt and apply to other systems.

To order the report, *Case study for building capacity to support implementation of water services risk management in district municipalities in KwaZulu-Natal and the Eastern Cape* (**WRC Report No. TT 693/16**), contact Publications at Tel: (012) 761 9300, Email: orders@wrc.org.za or Visit: www.wrc.org.za to download a free copy.